

Abstract

A switching power source device is provided which comprises a secondary MOS-FET 9 connected between a secondary winding 6 of a transformer 2, a reactor 11 connected in parallel to secondary winding 6 of transformer 2 for accumulating energy during the on-period of primary MOS-FET 4, and a secondary control circuit 12 connected to reactor 11 and a control terminal of secondary MOS-FET 9. Secondary control circuit 12 serves to turn secondary MOS-FET 9 off to accumulate energy in reactor 11, turn secondary MOS-FET 9 on to discharge energy accumulated in reactor 11, and turn secondary MOS-FET 9 off upon completion of energy release from reactor 11. As secondary control circuit 12 turns secondary MOS-FET 9 on and off in response to the periods for accumulating and discharging energy in reactor 11, the device can perform the efficient synchronous rectification operation of secondary MOS-FET 9 even under the fluctuating condition of input and output voltages E , V_O and control of power loss in output voltage V_O produced from secondary winding 6 of transformer 2.